

Technology Coaching: Empowering Teachers to Create 21st Century Classrooms

By Joseph M. Oliphant



About the Author: Joseph M.

Oliphant is the technology integration director for the Propel Charter Schools. Propel, based in Pittsburgh, is a not-for-profit organization, whose mission is to catalyze the transformation of public education in Southwestern Pennsylvania so that all children have access to high performing public schools. Propel's first school opened in 2003 with 180 children; the school occupied a basement at the former Homestead Hospital. In 2008-2009, more than 1,500 K-10 students now attend five newly renovated facilities in Homestead, Turtle Creek, McKeesport and Kennedy. Propel's first high school opened in Munhall in the fall of 2008.

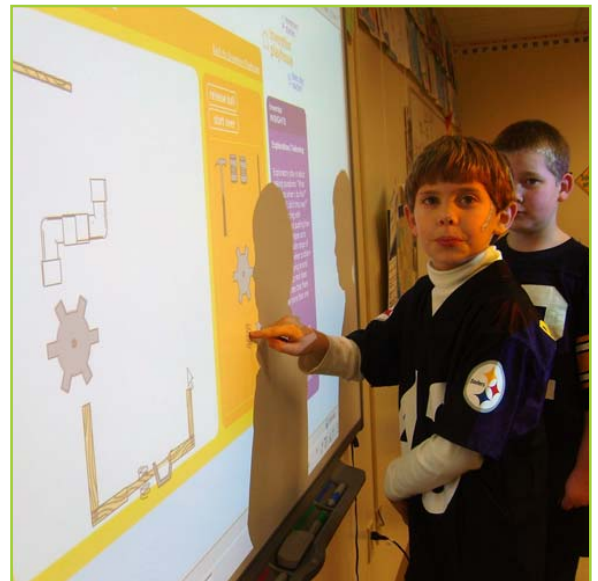
Mr. Oliphant received his master's in administration and supervision from California University of Pennsylvania, and his bachelor's in elementary education from Point Park University. Prior to his current position, he spent three years teaching alternative education at Holy Family Learning in Emsworth, and three years teaching second grade at Propel East.

Technology coaches are an invaluable resource to help today's educators navigate through the wealth of innovative and amazing tools available to them. Suppose you hold the best carpentry tools on the market and are told to build an armoire, but given no further instructions. Most of us would end up with a pile of scrap good for nothing other than the burn pile.

Making resources accessible to teachers who have received no guidance is no different than being presented with a pile of wood and no instructions. Coaching allows us to equip our teachers with the knowledge and necessary support to properly utilize all of the resources at their disposal.

According to the University of Kansas Center for Research on Teaching and Learning, research has indicated that coaching leads to successful implementation and effective use of proven instructional methods, given the proper conditions. These conditions entail administrative support and coaches who are qualified in the given field. In fact, research by this group has shown that an in-service with no follow up yielded only a 10 percent effective rate, while traditional coaching yielded an 85 percent effective rate.

As the technology integration director for Propel Schools in Pittsburgh, Pa., I have gotten to see first-hand how coaching teachers in the most effective utilization of technology has assisted tremendously in the classroom, benefiting both the students and the teachers. I believe that having a technology integration director or coach provides an invaluable service to an entire district. It is our belief that the purpose of coaching is to support individuals as professional learners, to increase knowledge and to cultivate personal success that ultimately impacts student achievement.



In a third-grade classroom at Propel East, students use a Smart Board to interact during a science lesson.

The Foundation of Effective Instructional Coaching Practices

- Establishing strong, trusting partnerships
- Differentiating support based on teacher needs
- Using data to drive instructional and coaching decisions
- Connecting research to practice
- Listening, reflecting and learning

Prior to my current position, I was a classroom teacher for six years. It has been my pleasure and great fortune in my current position to share my knowledge and passion with the teachers and students throughout the Propel organization, which includes grades K-10. On a daily basis, I am able to observe the effects technology coaching has in the classrooms.

In reality, a technology coach needs to wear many hats in the buildings where he or she works. At times he or she needs to be a sidekick, working alongside a teacher offering support and guidance; an organizer, coordinating the technology

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resources for teachers throughout the building; a cheerleader, offering encouragement; a listener, taking in the concerns and learning what the teachers and students need; and often a bit of a clairvoyant, anticipating what tools and programs are needed in the classrooms.

"A technology coach not only serves as a valuable informational resource to teachers, but serves as a motivator to inspire staff. Our technology coach introduces, plans, models and co-teaches with teachers to take away any concern that teachers may have about time and preparation. Overall, the people that benefit the most are the students because a teacher who was inspired and coached to use technology will be able to inspire our students to become 21st century learners," said Justin Aglio, principal at Propel Montour.

An effective and efficient technology coach can see the possibilities for technology in all areas of a school. I have seen how technology integration has worked to enhance the mainstream classroom, as well as special education classes, art classes and music. The benefits of technology can even be utilized by administration in efforts to greater engage and communicate with staff members.

"I asked Joe to help me to become comfortable using technology in my room," said Alison Babusci, an art teacher at Propel East. "We began with a lesson on using the projector. After just a couple of weeks, I used four PowerPoint presentations projected on the walls in my room to show the students examples of modern puppetry, shadow puppets, Gamelan orchestras and rock stars through the decades. The students seem to love having these large, colorful visual reference points for our discussions."

Perhaps the greatest example of the influence of technology on individual student achievement and

confidence is the example of a second grade autistic student I will refer to as Alex. He had a very difficult time starting conversations with the kids when the year began. However, using the Smart Board seemed to give him a natural opening with his peers. Alex has become a master and remembers how to use the various applications, even those the teacher used only a couple of times. He loves to "teach" the others by creating sentences, math problems, geometric shapes, etc. and then questioning his peers about each. By giving him "teaching" time, he learned the names of the other students and began to feel more comfortable with them.

New and more seasoned teachers alike can benefit from incorporating the resources in their classes. While all benefit, some more experienced teachers may be more reluctant to try these new methods of teaching. This is where a technology coach can be a great resource. Unassisted, the world of technology can be very intimidating and overwhelming. A coach can help navigate through, and bring a deeper understanding of the tools.

One teacher expressed that having a technology coach allowed her more time to teach the material rather than "playing" with the technology in an attempt to figure out what she was doing. Another teacher expressed that since becoming comfortable with the many technology tools available, he plans his lessons around the available technologies.

"It has allowed my students to be more interactive while following all of the standards. It has made teaching fun for me, and learning fun for the students. Having a coach available to assist teachers, I feel a lot more comfortable to try new things. Before, I would not attempt trying any new technology tools in fear of it not working during a lesson," said third-grade teacher, Luke Mortimer.

It is important to have checks and balances in place in your district to monitor the effectiveness of any facilitator program. I ask for regular feedback from staff members so that I am certain I am meeting their needs, but this is only one of many ways to be assured of effective coaching.

Visiting classes to check for daily appropriate uses of technology in their lessons is one great way to be sure the teachers feel comfortable with what is available. While some teachers may not feel comfortable reaching out for help, lack of use of these tools is an indicator that more attention needs to be given to these classrooms.

Another indicator that the coach is meeting the needs of the school is seeing the teachers exhibit continued and self-sustained growth. If teachers are working on their own to expand their understanding and personal capabilities with the technology resources, this is an important indicator that the coach has helped teachers to become confident enough in their ability to further explore new and emerging technologies.

Of course the best indicator of how effectively technology is being used in the classroom is student achievement. The coach, as well as the teacher, needs to revisit how technology is being used if the students are not demonstrating increased achievement.

Perhaps one of the greatest benefits a technology coach brings to a district is the excitement and passion regarding the advantages of technology resources. As a facilitator I have had the opportunity to heighten awareness and amplify excitement. A bit of a buzz has been created throughout the buildings concerning taking learning to the next level and teaching our students 21st century skills. I am proud to know that through my efforts I have enhanced both teaching and learning. Through

What happens during Saturday School?

The Red Lion Saturday School begins at 8:30 a.m. and lasts three hours dismissing at 11:30 a.m., so children can have lunch at home. Once the students arrive, they are given a light breakfast while the teachers collect their materials. The students go to their respective rooms where the teachers are already prepped to instruct. The four grade levels have 28 students each. The grade levels are divided into thirds. Therefore, there are three teachers to each grade level. Each teacher has a group of 9-10 students. The teachers prepare two very specific lessons to be taught. Three groups of students rotate through three teachers twice. The end result is that the students are exposed to six mini-lessons over the three-hour period.

This same format is used for all three Saturday School sessions. On the final day of the Saturday School, the children are given their post-test. A small concluding cere-

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mony is conducted to prep the children for the PSSA testing which will start the following Monday. This ceremony is also important to give the teachers and children a chance to bring Saturday School to a closure. The students leave with a certificate, a testing pencil and a small toy.

Does it work?

In our district it does! We have children who are on a waiting list wanting to attend sessions. The attendance is better than our regular daily average in the district. The teachers are very motivated to serve and instruct the students.

Families in the district have not had the chance to fully assess the program, however, initial reactions are very positive. The proof is really going to be when the data are reviewed after receiving the PSSA

results. The qualitative data that is available shows the students to be happy, confident, motivated, interested and committed.

After our first day of Saturday School, the students left the building telling their parents what they learned. One of the students had this to say, "Sorry mom I am late. My teacher had one more problem he wanted to show us and I didn't want to miss out learning how to do it. Saturday School is cool!"

The confidence and motivation may very well come from the fact that time is now extended for these students to learn. "Saturday School pays!" Many students believe that getting better grades is worth the extra day of school. They say they don't have anything better to do, anyway. One New Yorker, Lotoya Richards, 13, said, 'I am glad we're here (on Saturdays). If I were home, I'd just be cleaning my room'" (Stamford, p. 2).

For more information, contact lowem@rlasd.k12.pa.us.

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effective technology integration, teachers are able to collaborate, instruct and deepen content matter.

When students go home many can choose from their MP3 player, Play Stations, DVD collections, the Internet and so much more. Now, we as educators have the resources to show students learning can be equally entertaining. A technology coach can be a catalyst for these exciting changes if educators are willing to make school time as engaging and exciting as free time.

As educators, what we are asked to build is much more precious than anything made of wood. We are asked to build futures, dreams and shape successes for countless students that pass through our classrooms and hallways. Yes, we as educators have been given the top-of-the-line tools. What we do not need are instructions, because we have something more powerful - a network of teachers, administrators and facilitators who all share a common goal - the most effective and productive use of technology. We must



Students in this 4th grade classroom are completing projects in ability groups in their English class.

take the initiative and demonstrate success with each child with whom we have the honor and privilege of serving. *Our students are our masterpiece.*

For more information, contact the author at joliphant@propelschools.org.